

A KB can be converted to CNF using simple transformations.

Similarly any formula F can be converted to CNF.

~~cases~~

Now want to show
 $KB \wedge \neg F$ is unsatisfiable

look at clauses
and use the rule

notice
if ~~clause~~
top part of
clause then
bottom can
be used
in its stead

$$\frac{\{l_1, \dots, l_m\} \quad \{\bar{l}_m, l'_1, \dots, l'_m\}}{\{l_1, \dots, l_{m-1}, l'_1, \dots, l'_m\}}$$

see if ever get empty clause

Resolvent

~~Does not get an algorithm~~

Slightly more specific

clauses \leftarrow set of clauses for $KB \wedge \neg F$

new $\leftarrow \{ \}$

loop do

for each C_i, C_j in clauses do

resolvents \leftarrow ~~the~~ Resolve(C_i, C_j)

if resolvents contain $\{ \}$ return true

new \leftarrow new \cup resolvents

if (new \subseteq clauses) return false

clauses \leftarrow clauses \cup new